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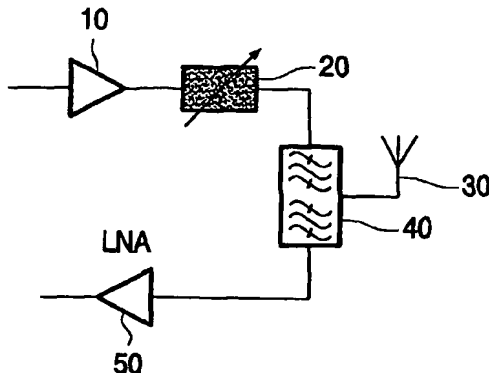
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(54) Title: DEVICE FOR DYNAMIC IMPEDANCE MATCHING BETWEEN A POWER AMPLIFIER AND AN ANTENNA



(57) Abstract: A device for dynamic impedance matching between a power amplifier and an antenna, having a circulator (210), which routes a signal received from the power amplifier (10) at a first port via a second port to the antenna (30) and diverts the signal reflected at the antenna (30) and received at the second port through a third port; and a controllable matching network (24, 240, 250); is characterized in that a directional coupler (200) diverts a proportion of the signal traveling from the power amplifier (10) to the antenna (30), from which the magnitude and phase of the signal may be derived, to a signal detector (220); and the circulator (210) routes the entire signal reflected at the antenna (30) into the signal detector (220); wherein the signal detector (220) passes the magnitude and phase of both the signal traveling to the antenna (30) and the signal reflected at the antenna (30) to a controller (230), which evaluates the information received from the signal detector (220) in order to determine

the present impedance value of the antenna (30) and to correct the controllable matching network (24, 240, 250) having active and passive components in accordance with the determined impedance value of the antenna (30).